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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,968	02/21/2002	Kouzou Fujino	NSG-207US	2725
23122	7590	10/13/2006	EXAMINER	
RATNERPRESTIA			CHOI, JACOB Y	
P O BOX 980			ART UNIT	PAPER NUMBER
VALLEY FORGE, PA 19482-0980			2875	

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/081,968

Applicant(s)

FUJINO ET AL.

Examiner

Jacob Y. Choi

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-8 and 10-39 is/are pending in the application.
- 4a) Of the above claim(s) 1,2,4,6 and 11-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5,7,8 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

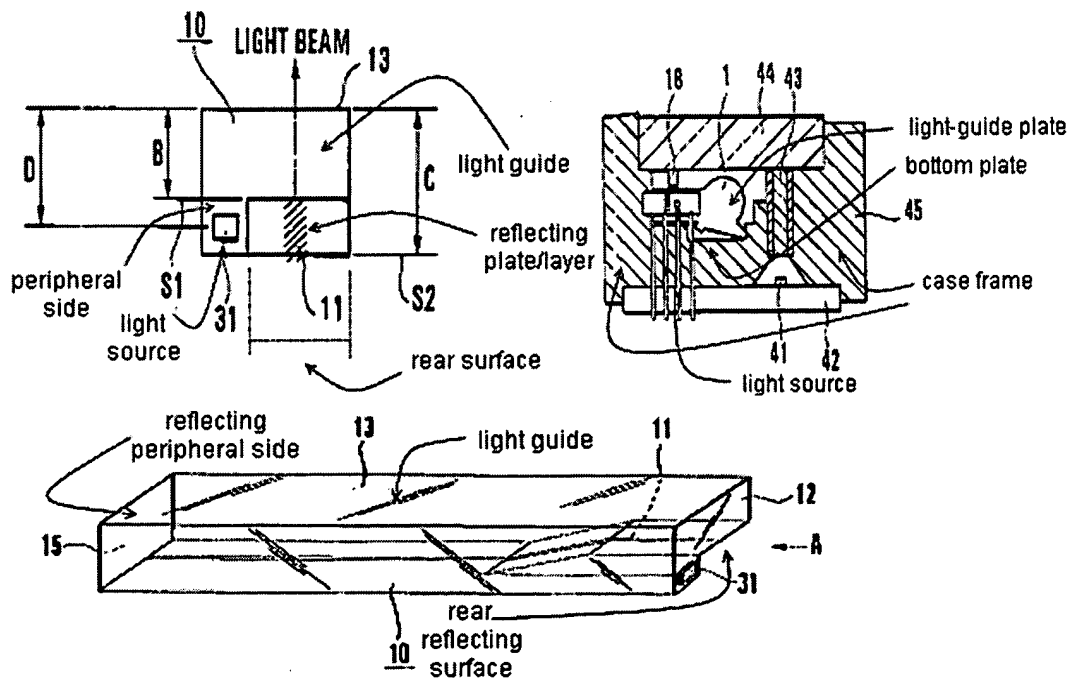
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims **5, 7, 8, & 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabata et al. (USPN 6,375,335).

Regarding claim 5, Tabata et al. discloses a light guide plate (e.g., 10) which is planar-shaped (e.g., Figures 1, 4, 7, 15-23, 27, 29-33) and which includes a front surface, a rear surface and a plurality of peripheral side surfaces, at least one light source (e.g., 31) which is arranged on at least one of the peripheral side-surfaces of the light guide plate (12), a reflecting plate (e.g., 11) arranged on the rear-surface (e.g., column 10, lines 30-40; "... *diffusion area 11 is formed in a portion of the back surface either by roughening or by applying a reflection coating ... etc.*") of the light guide plate

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including a portion which is arranged to be coextensive with the rear-surface (e.g., column 5, lines 35-50; "... diffusion area 11 is arranged on the opposite surface of an exit surface 13 of the light guide element 10 to reflect or scatter the light ... opposite surface or by applying a reflection coating thereto ... etc.") of the light guide plate (10) and a portion which is arranged on at least one of the peripheral side surfaces (e.g., column 10, lines 40-45; "... the opposite end of the LED element 31 also reflects the light that has transmitted through the light guide element 10, thus folding the light path back ward ... etc.") of the light guide plate (10) exclusive of the at least one of the peripheral side-surface corresponding to the at least one light source (e.g., Figures 14, 39, 41), a bottom plate (e.g., 45) which is arranged on rear-surface side of the reflecting plate (11), a case frame (e.g., 45) which is arranged (e.g., Figures 41, 42) around the peripheral side-surface of the light guide (10) plate via the reflecting plate (11).



Tabata et al. discloses the claimed invention except for the details of a light scattering sheet, which is arranged on an upper surface of the light guide plate.

However, Tabata et al. suggest that the light scattering area (11) is formed in a portion of the back surface (e.g., column 10, lines 30-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify teachings of Tabata et al. to provide addition or relocate the existing light scatter portion to the upper surface of the light guide to modify the light output. In addition, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Also, as suggested by prior art Tabata et al., column 5, lines 35-50; "... diffusion area 11 is arranged on the opposite surface of an exit surface 13 of the light guide element 10 to reflect or scatter the light ... opposite surface or by applying a reflection coating thereto ... etc.", and column 7, lines 60-65; "... coats it with a metal layer by evaporation or with a metallic glossy layer so that the specular reflection is cast to be position to be illuminated, thus improving the efficiency of illumination ... etc.", It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify teachings of Tabata et al. and provide a reflecting plate entirely on the rear-surface of the light guide, where the modification would enhance/improve the efficiency of illumination.

**Note:** Claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Things are clearly shown in reference patent drawing qualify as prior art features, even though unexplained by the specification (e.g., "a reflecting plate arranged coextensive with the rear surface of the light guide ... etc."). *In re Mraz*, 173 USPQ 25 (CCPA 1972).

Regarding claim 7, Tabata et al. discloses the claimed invention except for the specific light reflective percentage of the reflecting plate.

Tabata et al. suggest that (e.g., column 10, lines 30-40; "... a diffusion area 11 is formed in a portion of the back surface either by roughening or by applying a reflection coating ... etc.").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the reflectivity of the reflecting plate, also since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 8, Tabata et al. discloses the claimed invention explained above. In addition, Tabata et al. discloses the reflecting plate is made of a mirror, an aluminum thin film, or a high reflectance film. In addition, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design variation. *In re Leshin*, 125 USPQ 416.

Regarding claim 10, Tabata et al. discloses the light source (LEDs; 30) is arranged on the peripheral side-surface (12) of the light-guide plate (10) by fitting at least one pin (16) formed on the side surface of the light-guide plate (column 9, lines 5-15), into a hole (32) formed on the light source (LEDs) to the pin (16).

***Response to Amendment***

4. Examiner acknowledges that the applicant has amended claim 5. Claims 1, 2, 4-8 and 10-39 are pending in the application while claims 1, 2, 4, 6 and 11-39 are withdrawn from consideration.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 5, 7, 8, & 10 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

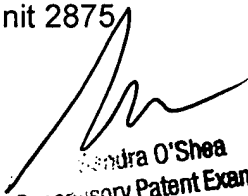
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y. Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC

Jacob Y Choi  
Examiner  
Art Unit 2875



Sandra O'Shea  
Supervisory Patent Examiner  
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